Screening for Appropriate Assessment

Proposed residential development at New Nangor Road, Clondalkin, Dublin 22

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Executive Summary

This *Screening for Appropriate Assessment* report has been prepared by NM Ecology Ltd on behalf of South Dublin County Council (the applicant) as part of a planning application for a residential development at New Nangor Road, Clondalkin. The proposed development will consist of 91 no. dwelling houses with associated landscaped areas, roads and services.

The proposed development site is within the catchment of the River Camac (a tributary of the River Liffey), which provides a potential hydrological connection to a number of Natura 2000 sites in Dublin Bay. In accordance with their obligations under the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477/2011), South Dublin County Council must assess whether the proposed development could have 'likely significant effects' on these or any other Natura sites.

This document provides supporting information to assist the local authority with an Appropriate Assessment screening exercise, including: a description of the proposed development, details of its environmental setting, a map and list of Natura 2000 sites within the potential zone of impact, and an assessment of potential impacts. It is concluded that the proposed development will not cause direct or indirect impacts on any Natura 2000 sites, and that Appropriate Assessment is not required.

1 Introduction

1.1 Background to Appropriate Assessment

Approximately 10% of the land area of Ireland is included in the European Network of Natura 2000 sites, which includes Special Protection Areas (SPAs) to protect important areas for birds, and Special Areas of Conservation (SACs) to protect a range of habitats and species. Legislative protection for these sites is provided by the *European Council Birds Directive* (79/409/EEC) and *E.C. Habitats Directive* (92/43/EEC, as amended), which are jointly transposed into Irish law by the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477/2011, as amended).

Regulation 42 (1) states that: "*Screening for Appropriate Assessment of a plan or project for which an application for consent is received* […] *shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on* [any Natura 2000 sites]." To ensure compliance with this regulation, planning authorities must screen all planning applications for potential impacts on Natura 2000 sites. Supporting information may be requested from the applicant to assist with this process.

This document provides background information to assist the local authority with a *Screening for Appropriate Assessment* exercise for the proposed development. It includes an outline of the proposed works, details of the environmental setting of the site, an appraisal of future development proposals in the area (potential for 'in-combination effects'), a map and list of Natura 2000 sites within the potential zone of impact, and an assessment of potential impacts.

1.2 Statement of authority

All surveying and reporting was carried out by Nick Marchant, the principal ecologist of NM Ecology Ltd. He has an MSc in Ecosystem Conservation and Landscape Management from NUI Galway and a BSc in Environmental Science from Queens University Belfast. He is a member of the Chartered Institute of Ecology and Environmental Management, and operates in accordance with their code of professional conduct.

He has eleven years of professional experience, including eight years as an ecological consultant, one year as a local authority biodiversity officer, and two years managing an NGO in Indonesia. He provides ecological assessments for developments throughout Ireland and Northern Ireland, including wind farms, infrastructural projects (water pipelines, greenways, etc.), and a range of residential and commercial developments.

1.3 Methods

This report has been prepared with reference to the following guidelines:

- *Appropriate Assessment of Plans and Projects in Ireland* (Department of the Environment, Heritage and Local Government, 2009)
- *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4)*, E.C., 2002.
- *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal* and Marine (Chartered Institute of Ecology and Environmental Management, 2018)

In accordance with Section 3.2 of *Appropriate Assessment of Plans and Projects in Ireland*, the screening exercise was conducted using the following steps:

1. Description of the project and local site characteristics
2. Identification of relevant Natura 2000 sites, and compilation of information on their qualifying interests and conservation objectives
3. Assessment of potential impacts upon Natura 2000 sites, including:
    - Direct impacts (e.g. loss of habitat area, fragmentation)
    - Indirect impacts (e.g. disturbance of fauna, pollution of surface water)
    - Cumulative / 'in-combination' effects associated with other concurrent projects
4. Screening Statement with conclusions

A desk-based study was carried out using data from the following sources:

- Plans and specifications for the proposed development
- Qualifying interests / conservation objectives of Natura 2000 sites from www.npws.ie
- Bedrock, soil, subsoil, surface water and ground water maps from the Geological Survey of Ireland webmapping service (www.gsi.ie/mapping.htm), the National Biodiversity Data Centre (http://maps.biodiversityireland.ie/), and the Environmental Protection Agency web viewer (http://gis.epa.ie/EPAMaps/)
- The South Dublin County Development Plan 2016-2022, and details of permitted or proposed developments from the local authority's online planning records

All web-based resources were accessed in February 2019.

2 Description of the Project

2.1 Environmental setting

The proposed development site is located in a suburban setting in the west of Dublin City. It currently contains some areas of amenity grassland, with small patches of semi-mature trees in the east of the site. The northern boundary of the site is formed by New Nangor Road, with smaller residential roads on the eastern and western boundaries, and low-density housing and some community facilities along the southern boundary.

Geology and soils

The underlying bedrock is 'dark-grey to black limestone and shale' of the Calp formation, which is a locally-important aquifer (Geological Survey of Ireland). Sub-soils are limestone till, and soils are grey-brown podzolics / brown earths (which are deep, neutral/alkaline and well drained). As the soil and bedrock is well drained, it is expected that most rainwater falling on the site would percolate to ground rather than flowing over land.

Hydrology

There are no watercourses within or surrounding of the proposed development site; the closest is the Camac River, which is located approx. 400 m to the south. The river flows in a north-easterly direction and joins the River Liffey at Heuston Station approximately 8.5km downstream. The Camac River is currently of poor status within Dublin City (Water Framework Directive status assessments 2010-2012) and the River Liffey estuary is of moderate status at its point of confluence with the Camac River, but the transitional and coastal waters of Dublin Bay are of good status.

It should be noted that there is no clear hydrological connection between the proposed development site and the Camac River, because any over-land runoff would be interrupted by intervening roads and residential developments.

2.2 Description of the proposed development

The proposed development will consist of 91 no. new dwelling houses in a range of designs, including apartments, houses and duplex units. Road access will be from the east and south of the site, which will lead to short sections of internal road and parking areas. Some mature trees in the east of the site be retained and incorporated into landscaped areas, with additional landscaping in the north of the site alongside the New Nangor Road. Foul water and surface water will be discharged to local authority foul and storm sewers on adjacent roads.

2.3 Other nearby developments (potential in-combination effects)

The proposed development site is located in a suburban setting in the west of Dublin City. It is included in zone RES of the South Dublin County Council Development Plan 2016 – 2022, for which the planning objective is "*to protect and/or improve residential amenity*". Most of the surrounding area is already in residential use, and it is unlikely to be under significant development pressure in the short to medium term.

Live and recently-approved planning applications in the vicinity of the site were reviewed on the online planning records of South Dublin County Council (SDCC). Permission was recently granted for the construction of three new school buildings at Gaelscoil na Camóige agus Gaelscoil Chluain Dolcáin (planning references SD17A/0035 and SD18A/0447) located approx. 200 m to the east of the proposed development site. If constructed at the site time as the proposed development, there is a potential risk of in-combination effects. All other planning applications in the surrounding area were for small-scale works such as residential extensions, none of which were considered to pose a risk of in-combination effects.

In conclusion, the area surrounding the proposed development site does not appear to be subject to significant development pressure. However, one planning permission was identified that could potentially act in-combination with the proposed development to increase the scale of potential ecological impacts. This will be addressed in Section 4.3.

3 Description of Natura 2000 sites

3.1 Identification of Natura 2000 sites within the zone of influence

The proposed development site is not located within 5km of any Natura 2000 sites (Figure 1). However, considering its proximity to the Camac River, which is connected to the River Liffey, the potential zone of impact[1] was extended eastwards to include the Natura 2000 sites in Dublin Bay.

[1] In *Appropriate Assessment of Plans and Projects in Ireland*, it is noted that the potential 'zone of impact' of a development "*must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects.*" A radius of 15km may be used for large-scale projects, but for small projects it may be as little as 100m.

Figure 1	Natura 2000 sites
Location	New Nangor Road, Clondalkin
Applicant	South Dublin County Council
Date	25-02-2019

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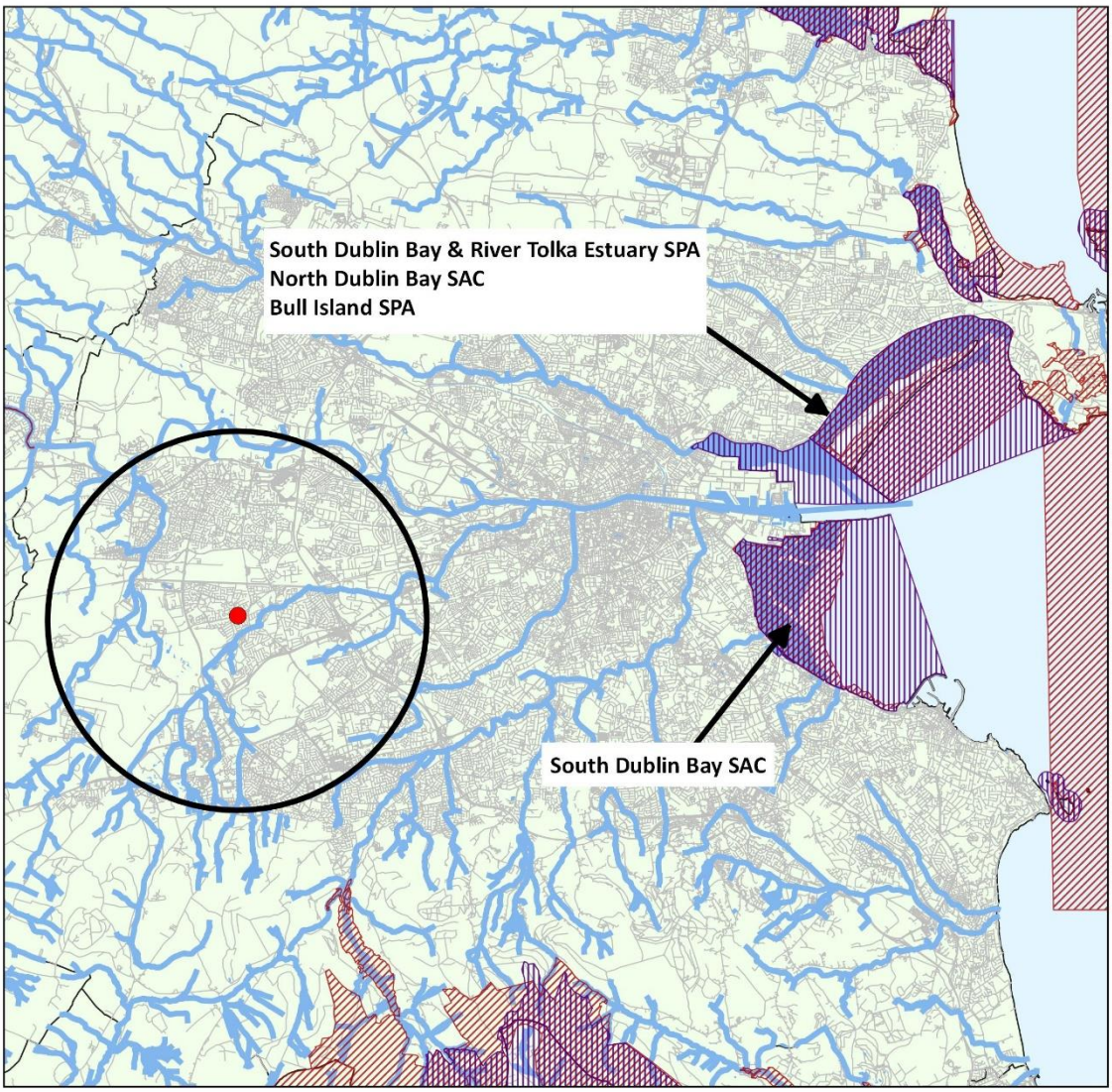
Site location
- Proposed development site
- Buffer zone (5km)
- Roads
- Watercourses

Natura 2000 sites
- Special Areas of Conservation
- Special Protection Areas



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0 1 2 3 4 5 km

Table 1: Natura 2000 sites of relevance to the proposed development site

Site Name	Distance [2]	Qualifying Interests
South Dublin Bay and River Tolka Estuary SPA (site code 4024)	15km downstream	**Habitats:** coastal wetlands **Special conservation interests:** light-bellied brent goose, oystercatcher, ringed plover, grey plover, knot, sanderling, dunlin, bar-tailed godwit, redshank, black-headed gull (wintering populations), arctic tern, roseate tern (passage), and common tern (breeding and passage)
South Dublin Bay SAC (210)	17 km downstream	**Annex I habitats:** inter-tidal mudflats / sandflats **Annex II species:** none
North Dublin Bay SAC (206)	17 km downstream	**Annex I habitats:** inter-tidal mudflats / sandflats (including patches of *Salicornia* and other annuals), *Spartina* swards, salt marshes, annual vegetation of drift lines, embryonic shifting dunes, white dunes, grey dunes, dune slacks **Annex II species:** petalwort *Petalophyllum ralfsii*
North Bull Island SPA (4006)	17 km downstream	**Habitats:** coastal wetlands **Special conservation interests:** wintering populations of light-bellied brent goose, Shelduck, teal, pintail, shoveler, oystercatcher, golden plover, knot, sanderling, dunlin, black-tailed godwit, bar-tailed godwit, curlew, redshank, turnstone, black-headed gull

3.2 Identification of potential pathways for indirect impacts

Indirect impacts on a Natura 2000 site can only occur if there is a viable pathway between the source (the proposed development site) and the receptor (the habitats and species for which a site has been designated). The most common pathway for impacts is surface water, for example if a pollutant is washed into a river, carried downstream, and subsequently reaches aquatic habitats or species. Other potential pathways are groundwater, air (e.g. airborne dust or sound waves), or land (e.g. flow of liquids, vibration). The zone of effect for hydrological impacts can be several kilometres, but for air and land it is rarely more than one hundred metres. An appraisal of potential pathways for impacts on the Natura 2000 sites referenced in Table 1 is provided below.

The River Camac (and subsequently the River Liffey) could potentially provide a distant hydrological pathway between the proposed development site and four Natura 2000 sites in Dublin Bay. However, there are no surface water connections between the proposed development site and the River Camac, because any overland flow would be intercepted by intervening roads. In addition, even if any material could reach the river, there is at least 15 km

[2] Some of the potential pathways for impacts on Natura 2000 sites are via intervening watercourses, so distances are measured along the length of connecting waterways rather than a linear measurement to the closest boundary of the Natura 2000 site.

of intervening watercourse between the proposed development site and the Natura 2000 site, so any pollutants would be diluted to negligible concentrations before they could reach Dublin Bay. Therefore, there is no viable surface water pathway to any of the Natura 2000 sites. The distances involved are also too great for impacts via groundwater, air or land pathways. On this basis, all of these potential pathways can be screened out.

4 Assessment of potential impacts

4.1 Direct impacts

The proposed development site is not located within any Natura 2000 sites, so there is no risk of habitat loss, fragmentation or any other direct impacts.

4.2 Indirect impacts

Potential changes in water quality (construction phase)

Construction works typically generate fine sediments, and may occasionally cause accidental spills of oil or other toxic chemicals, which can be harmful to aquatic / marine habitats and species. However, no hydrological connections were identified between the proposed development site and any Natura 2000 sites, so there is no pathway for indirect impacts. Consequently, the risk that pollutants from the construction site could cause significant negative impacts on any Natura 2000 sites is negligible, even in a worst-case scenario and in the absence of standard site-management measures.

Potential changes in water quality (operational phase)

All foul water from the proposed development will be discharged to a local authority sewer and treated in the Ringsend waste water treatment plant. The plant is currently within capacity and providing a high level of treatment before discharge to Dublin Bay. It is the responsibility of the local authority to provide adequate treatment of foul water passing through the treatment plant, and to assess any potential impacts that it may have on the Natura 2000 network.

All surface-water runoff from hard surfaces will be discharged to a local authority storm sewer on the Old Nangor Road. The subsequent management of surface water is not clear, but it is likely to pass through oil and/or silt interceptors and subsequently be discharged to a local watercourse. It is the responsibility of the local authority to provide adequate treatment of surface water prior to discharge, and to assess any potential impacts that it may have on the Natura 2000 network.

Consequently, it can be concluded that foul water and surface water during the operation of the development would not cause any significant impacts upon water quality in any Natura 2000 sites.

4.3 Potential in-combination effects

As the proposed development will not have any impacts on nearby waterbodies or Natura 2000 sites, there is no risk of in-combination effects with other developments.

5 Screening Statement

Article 42 (7) of the *European Communities (Birds and Natural Habitats) Regulations 2011* states that: "*The public authority shall determine that an Appropriate Assessment of a plan or project is not required* […] *if it can be excluded on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site."*

To assist the planning authorities with the screening exercise, we have provided supporting information including: a description of the proposed development; an outline of its environmental setting; details of Natura 2000 sites within the potential zone of impact; and an assessment of potential impacts. Based on this information, we have demonstrated that there will be no risk of direct or indirect impacts on any Natura 2000 sites, so we conclude that Appropriate Assessment is not required.

References

Department of the Environment, Heritage and Local Government, 2009. *Appropriate Assessment of Plans and Projects in Ireland.* National Parks and Wildlife Service, DCHG, Dublin, Ireland.

European Commission. 2002. *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*. Office for Official Publications of the European Communities, Luxembourg.